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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,591	09/27/2004	Michael Burr	2006579-0272 (CTX-093DV)	5590

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EXAMINER	
NICKERSON, JEFFREY L	

ART UNIT	PAPER NUMBER
2142	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/711,591	BURR ET AL.	
	Examiner	Art Unit	
	JEFFREY NICKERSON	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 July 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to Application No. 10/711,591 filed on 27 September 2004 as a divisional of Application No. 10/711,583 filed on 27 September 2004. The request for continued examination presented on 14 August 2008, which provides change to claims 1, 11, 13, 16, 26, and 28, is hereby acknowledged. Claims 1-30 have been examined.

Drawings

2. The replacement drawings presented on 14 July 2008 are accepted. The amendment presented on 14 July 2008 providing change to the specification regarding various reference characters is noted. All outstanding objections to the drawings are therefore obviated and hereby withdrawn.

Specification

3. The amendment presented on 14 July 2008 providing change to the specification is noted. The outstanding objection to the abstract is hereby withdrawn. The outstanding objection to the disclosure is maintained for the reasons stated below.

4. The disclosure is objected to under 37 CFR 1.84(p)(4) because of an inconsistent use of reference characters. The applicant uses reference character 320 to represent a socket library ([0072], "After intercepting a socket library 320 API call..."), when it should be 322. Appropriate correction is required.

Claim Objections

5. The amendment presented on 14 July 2008 providing change to 11, 13, 26, and 28 is noted. All outstanding advisories and/or warnings regarding double patenting are hereby withdrawn. A new objection is made below.

Claims 1 and 16 are objected to for confusing grammar in the preamble, due to the previous amendment overcoming the 112 rejection. The examiner recommends changing the preamble to read similar to the following: "A method for providing a uniform network address, for a user accessing a computer on a network, independent from the computer the user is accessing, the method comprising the steps of:"

Claim Rejections - 35 USC § 112

The amendment presented on 14 July 2008 providing change to claims 1 and 16 is noted. All outstanding rejections under 35 USC 112 are hereby withdrawn.

Response to Arguments

6. Applicant's arguments, filed 14 August 2008, with respect to the rejection(s) of claim(s) 1-30 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made below.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-6 and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the public use of the products Microsoft Windows 2000/2003 Server, as evidenced by Microsoft01 ("Remote Access VPN Connections"), and in further view of the public use of the products ISA Server 2000/2004, as evidenced by ISA01 ("Common DNS Issues in VPN Networking"), and LinuxQuestions ("Multiple Simultaneous VPN Connections?").

Regarding claim 1, Windows2000Server teaches a method for providing a network address, for a user accessing a computer on a network, independent from the computer the user is accessing, the method comprising the steps of:

obtaining a plurality of virtual identifiers, each of the plurality of virtual identifiers comprising an identifier uniquely identifying a user from a plurality of users (Microsoft01: pg 1, specifies internal/private address for VPN use; pg 3, last paragraph specifies using DHCP for internal/private IPs);

assigning, from a plurality of virtual identifiers, a first virtual identifier to a first user (VPN client connection) accessing the network via a first computer, the first

computer having a computer IP address to connect to the network (Microsoft01: pgs 1-2 specify VPN basics such as public IPs and private IPs; pg 3, last paragraph specifies DHCP use);

using the first virtual identifier assigned to the first user for network communications of the first user communicated via the first computer (Microsoft01: pgs 1-2).

Microsoft01 does not teach:

wherein the virtual identifier is a host name;

associating the host name with a unique IP address for the user;

performing the above for a second user accessing the network via the same computer.

ISAServer2000, in a similar field of endeavor, teaches wherein the virtual identifier is a host name (ISA01: pg 1);

Associating the host name with a unique IP address for the user (ISA01: pg 1-2 provides it's possible to give VPN clients an internal DNS host name).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of ISAServer2000 for using DNS in a VPN environment. The teachings of ISAServer2000, when implemented in the Windows2000Server system, will allow one of ordinary skill in the art to use hostnames in a VPN environment. One of ordinary skill in the art would be motivated to utilize the teachings of ISAServer2000 in the Windows2000Server system in order to use hostnames in the VPN environment.

The Windows2000Server/ISAServer2000 system does not teach performing the above for a second user accessing the network via the same computer.

LinuxQuestions, in a similar field of endeavor, teaches it is possible to have more than one simultaneous VPN connection running from the same VPN client computer. Thus, LinxusQuestions teaches performing the above for a second accessing the network via the same computer (LinuxQuestions: pgs 1-4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of LinuxQuestions for starting multiple simultaneous VPN connections from a single computer. The teachings of LinuxQuestions, when implemented in the Windows2000Server/ISAServer2000 system, will allow one of ordinary skill in the art to create simultaneous VPN connections from a single client machine, each connection having a unique internal IP and hostname. One of ordinary skill in the art would be motivated to utilize the teachings of LinuxQuestions in the Windows2000Server/ISAServer2000 system in order to allow a multiple users to VPN from a single computer.

Regarding claim 2, the Windows2000Server/ISAServer2000/LinuxQuestions system teaches wherein step (a) further comprises obtaining a plurality of IP addresses for assigning unique IP addresses to each of the first user and the second user (Microsoft01: pgs 1-3 provide DHCP is possible for assigning internal IPs to VPN client connections).

Regarding claim 3, the Windows2000Server/ISAServer2000/LinuxQuestions system teaches wherein step (a) further comprises obtaining at least one of the plurality of IP addresses from a DHCP server (Microsoft01: pgs 1-3 provide DHCP is possible for assigning internal IPs to VPN client connections).

Regarding claim 4, the Windows2000Server/ISAServer2000/LinuxQuestions system teaches wherein step (a) further comprises reserving at least one of the plurality of IP addresses for at least one of the first user and second user (Microsoft01: pgs 1-3 provide DHCP is possible for assigning internal IPs to VPN client connections).

Regarding claim 5, the Windows2000Server/ISAServer2000/LinuxQuestions system teaches wherein step (c) further comprises associating the at least one reserved IP address with at least one of the first virtual host name and the second virtual host name (ISA01: pgs 1-5 provide for DNS hostname mapping in a VPN environment).

Regarding claim 6, the Windows2000Server/ISAServer2000/LinuxQuestions system teaches wherein step (b) further comprises assigning, from the plurality of IP addresses, a first IP address to the first user, and a second IP address, different from the first IP address, to the second user (Microsoft01: pgs 1-3 provides DHCP use, which will provide non-leased IPs).

Regarding claims 16-17, these system claims correspond to the method claims 1-2, respectively, and the same rationale of rejection is used, where applicable.

Regarding claims 19-21, these system claims correspond to method claims 3-5, respectively, and the same rationale of rejection is used, where applicable.

Regarding claim 18, this system claims correspond to method claim 6 and the same rationale of rejection is used, where applicable.

9. Claims 7-9, 14-15, 22-24 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the public use of the products Microsoft Windows 2000/2003 Server, as evidenced by Microsoft01 ("Remote Access VPN Connections"), in view of the public use of the products ISA Server 2000/2004, as evidenced by ISA01 ("Common DNS Issues in VPN Networking"), and LinuxQuestions ("Multiple Simultaneous VPN Connections?"), and in further view of Official Notice.

Regarding claim 7, the Windows2000Server/ISAServer2000/LinuxQuestions system teaches the VPN client having access to the internal DNS server.

The Windows2000Server/ISAServer2000/LinuxQuestions does not explicitly state registering with the DNS.

An official notice is taken that such use of registering with DNS servers was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize any known DNS utilization techniques including registering because it would have enabled practicing the system.

Regarding claim 8, the Windows2000Server/ISAServer2000/LinuxQuestions system teaches wherein the name resolution service comprises one of DNS or a WINS (ISA01: pgs 1-5).

Regarding claim 9, the Windows2000Server/ISAServer2000/LinuxQuestions system does not teach wherein the virtual host name identifies one of a session of the user or a program used by the user.

An official notice is taken that such use of a virtual hostname to identify the VPN client connection was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to associate virtual hostnames with internal IPs and therefore be capable of identifying the VPN client connection because it would have enabled practicing the system.

Regarding claims 14 and 15, the Windows2000Server/ISAServer2000/LinuxQuestions system does not teach naming the at least one of the plurality of virtual host names with

a portion of characters representing the user's identity on the network and attaching a suffix identifying the session when the user is concurrently connected.

An official notice is taken that such use of the above hostname naming was well known in the art at the time the invention was made by one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any naming convention of virtual hostnames because it would have enabled practicing the system.

Regarding claims 22-24 and 29-30, these system claims correspond to the method claims 7-9 and 14-15, respectively, and the same rationale of rejection is used, where applicable.

10. Claims 10-11 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the public use of the products Microsoft Windows 2000/2003 Server, as evidenced by Microsoft01 ("Remote Access VPN Connections"), in view of the public use of the products ISA Server 2000/2004, as evidenced by ISA01 ("Common DNS Issues in VPN Networking"), and LinuxQuestions ("Multiple Simultaneous VPN Connections?"), and in further view of VelocityReviews ("Assign Static IP to a VPN user").

Regarding claim 10, the Windows2000Server/ISAServer2000/LinuxQuestions system teaches resolving host names internal IP addresses in a VPN environment thereby supporting assign hostnames to VPN clients.

The Windows2000Server/ISAServer2000/LinuxQuestions system does not teach further comprising the virtual hostname following the first user from the first computer to a second computer and being associated with the second computer.

VelocityReviews, in a similar field of endeavor, teaches assigning VPN users an internal IP from a static IP pool (VelocityReviews: pg 1-5). Thus, if a user ended their VPN session on a first computer and started one on a second computer, they would be assigned the sole internal static IP of the pool. If this internal static had an associated DNS hostname it would resolve back to the user's static IP and for communications with the second computer it would be encapsulated and therefore associated the second computer's public IP.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of VelocityReviews for using static IP pools when assigning internal IPs to VPN users. The teachings of VelocityReviews, when implemented in the Windows2000Server/ISAServer2000/LinuxQuestions system, will allow one of ordinary skill in the art to assign VPN users a static internal IP, associated with an internal hostname. One of ordinary skill in the art would be motivated to utilize the teachings of VelocityReviews in the Windows2000Server/ISAServer2000/LinuxQuestions system in order to manage VPN users effectively.

Regarding claim 11, this claim contains limitations corresponding to claim 10 for a second user and therefore the same rationale of rejection is used, where applicable.

Regarding claims 25-26, these system claims correspond to the method claims 10-11, respectively, and the same rationale of rejection is used, where applicable.

11. Claims 12-13 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the public use of the products Microsoft Windows 2000/2003 Server, as evidenced by Microsoft01 ("Remote Access VPN Connections"), in view of the public use of the products ISA Server 2000/2004, as evidenced by ISA01 ("Common DNS Issues in VPN Networking"), LinuxQuestions ("Multiple Simultaneous VPN Connections?"), and VelocityReviews ("Assign Static IP to a VPN user"), and in further view of Pirot et al (US 6,856,676 B1).

Regarding claim 12, the Windows2000Server/ISAServer2000/LinuxQuestions/VelocityReviews system teaches resolving host names internal IP, assigned from a static IP pool, addresses in a VPN environment thereby supporting assign hostnames to VPN clients.

The Windows2000Server/ISAServer2000/LinuxQuestions/VelocityReviews system does not teach further comprising assigning, while the first user accesses the first computer, a third virtual hostname to the first user accessing a second computer

and associating the third virtual hostname with an IP address of the second computer associated with the first user.

Pirot, in a similar field of endeavor, teaches allowing simultaneous user logins to a VPN from different computers (Pirot: col 11, line 41 – col 12, line 21). Therefore, if a user were to have a static IP pool of multiple internal IPs (VelocityReviews: pgs 1-5), each associated with a internal hostname resolved via an internal DNS server (ISA01: pgs 1-5), the user could start a VPN connection on one computer and receive a first static IP and associated hostname, and, go to a second computer and start a VPN connection and receive a second static IP and associated hostname.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Pirot for allowing and limiting simultaneous VPN connections per user. The teachings of Pirot, when implemented in the above system, will allow one of ordinary skill in the art to allow and limit a maximum number of simultaneous VPN connections per user. One of ordinary skill in the art would be motivated to utilize the teachings of Pirot in the above system in order to allow users to move from one computer to another and start VPN connections without ending their connection to a reasonable amount.

Regarding claims 27-28, these system claims correspond to the method claims 12-13, respectively, and the same rationale of rejection is used, where applicable.

Cited Pertinent Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Chen et al (US 2003/0200321 A1) discloses a system for connecting to VPNs automatically.

b. Chiles et al (US 7,353,280 B2) discloses a system for NATing at a home network with further VPN use.

c. Engberg (US 2003/0158960 A1) discloses secure communication using embedded virtual identifiers.

d. Hoguta et al (US 6,725,303 B1) discloses assigning a subscriber ID to users so that they personalize various connection preferences and still maintain billing.

e. Johnson et al (US 2005/0108407 A1) discloses a system for virtualizing network identifiers.

f. Kim (US 7,366,188 B2) discloses a system utilizing VPN tunneling into multiple VPNs and avoiding assignment of conflicting internal IP assignment.

g. Nassar (US 6,801,528 B2) discloses a system using simultaneous connections to service providers using a single machine by utilizing NAT.

h. Palojarvi et al (US 2005/0198306 A1) discloses a system for accessing multiple VPNs simultaneously.

i. Uhlik et al (US 2003/0028649 A1, US 7,363,376 B2) discloses a system that supports identifying simultaneous sessions of a single subscriber.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY NICKERSON whose telephone number is (571)270-3631. The examiner can normally be reached on M-Th, 8:30-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. N./
Jeffrey Nickerson
Examiner, Art Unit 2142

/Andrew Caldwell/
Supervisory Patent Examiner, Art Unit 2142